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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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DAVID JACOB			EXAMINER	
7512 MARK			GUIDOTTI, LAURA COLE	
LA PALMA, CA 90623			ART UNIT	PAPER NUMBER

1744

DATE MAILED: 05/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/711,358	Applicant(s) MORSE ET AL.	
	Examiner Laura C. Guidotti	Art Unit 1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 15, 16 and 18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14, 17 and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 September 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>09142004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of group I (claims 1-14, 17, 19) in the reply filed on 17 April 2006 is acknowledged. The traversal is on the ground(s) that the claims 15 and 18 have been amended so that the search required for group I is the also search required for claims 15 and 18. This is not found persuasive because the drive unit of group I has an outer surface and a sheet having first and second sides is attached to the outer surface. In the instant case the cleaner does not require that the sheet is directly on the drive unit and the cleaner of group I does not include an activator and may be used by a different method, such as one that does not require activating the driving unit, such as manually moving the cleaner. Again, the cleaner of group I does not require an envelope of cleaning sheets and may have a process of making that includes a drive unit and internal mechanism. Also, the different inventions are a method of cleaning that requires a drive unit with an internal mechanism, applying a sheet directly to the drive unit, activating the drive unit, and placing the drive unit and sheet onto a surface (group II, claims 15 and 18) and a method of making a covering such as forming an envelope of cleaning sheets (group III, claim 16).

The requirement is still deemed proper and is therefore made FINAL. Claims 15-16 and 18 have been WITHDRAWN from consideration.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the shape of the outer

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surface of the drive unit is at least substantially elliptical or cylindrical (claims 5-6, 8-9), means to detect and display low battery power (claim 12), an alarm (claim 13), and means to detect and indicate that the machine's motion is impeded (claim 14) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. Claims 2-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Independent Claim 1 is "A self-propelled cleaner..." as indicated in its preamble. The preamble of each of claims 2-14 recites "The self-propelled cleaning machine..." which lacks antecedent basis. The Applicant should provide a consistent preamble so that it is clear.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 4, 10, 17, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Ussen, USPN 6,550,089.

Ussen discloses the claimed invention including a drive unit (9) having an outer surface (Figure 4) and a motorized internal mechanism adapted to impart rotary motion to the drive unit (1; Column 2 Line 67 to Column 3 Line 2), a sheet (10) having a first and second side (see Figure 4), wherein a first side of the sheet is operatively connected to the outer surface of the drive unit to impart rotary motion to the sheet (Column 3 Lines 43-46; Figure 4) (claims 1 and 19). Regarding claim 2, the sheet completely encompasses the drive unit.(as it is made of two hemispheres, Column 3 Lines 43-46). Regarding claim 4, the outer surface of the drive unit is substantially spherical (Column 3 Line 43; Figure 4). Regarding claim 10, the sheet is directly connected to the drive unit (Figure 4). Regarding claim 17, the method of making the

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cleaner includes obtaining the drive unit having a motorized internal mechanism and providing a sheet for use with the drive unit (Column 3 Lines 43-46).

5. Claims 1-4, 7, 10-11, 14, 17, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 10-262881 (see computer generated English translation).

JP 10-262881 discloses the claimed invention including a drive unit (2) having an outer surface (11, 12; see Figure 1) and a motorized internal mechanism adapted to impart rotary motion to the drive unit (21; paragraph 28), a sheet (3) having a first and second side (see Figure 1), wherein a first side of the sheet is operatively connected to the outer surface of the drive unit to impart rotary motion to the sheet (Figures 1-2; paragraph 38) (claims 1 and 19). Regarding claims 2-3, the sheet (3) may completely encompass the drive unit (as shown in Figure 2) or may partially encompass the drive unit (paragraph 33, last sentence). Regarding claims 4 and 7, the shape of the outer surface of the drive unit is at least substantially spherical (see Figures). Regarding claims 10 and 11, the sheet is directly connected to the drive unit (see Figure 1; paragraph 33). Regarding claim 14, there is a "means" to detect and indicate that the machine's motion is impeded, the "means" being if there is a collision with an obstruction, the ball will change directions (paragraph 38). Regarding claim 17, the method of making the cleaner includes obtaining the drive unit having a motorized internal mechanism and providing a sheet for use with the drive unit (paragraph 33).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 10-262881 (see computer generated English translation) as applied to claims 2 and 3 respectively, in view of Ruppel, USPN 3,696,557.

JP 10-262881 discloses all elements above, however does not disclose that the shape of the outer surface of the drive unit is at least substantially elliptical.

Ruppel teaches a toy that operates by a motorized internal mechanism (16) within a drive unit (12) that is substantially elliptical shaped (see Figure 1) for amusement (Column 2 Lines 4-9, this passage also states that the unit could be spherical as well) and is for rolling on a floor surface (Column 2 Lines 9-14).

It would have been obvious for one of ordinary skill in the art to modify the shape of the outer surface of the drive unit of JP 10-262881 to be elliptical, as Ruppel teaches, to offer further amusement to a user in that the elliptical drive unit would exhibit a different path of movement.

7. Claims 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 10-262881 (see computer generated English translation) as applied to claims 2 and 3 respectively, in view of Gibson, USPN 2,977,714.

JP 10-262881 discloses all elements above, however does not disclose that the shape of the outer surface of the drive unit is at least substantially elliptical.

Gibson teaches a toy that operates by a motorized internal mechanism (58) within a drive unit (10, 12, 14) that is substantially cylindrical shaped (see Figure 1) for amusement (Column 1 Lines 15-19) and is for rolling on a surface (Column 3 Lines 11-20).

It would have been obvious for one of ordinary skill in the art to modify the shape of the outer surface of the drive unit of JP 10-262881 to be cylindrical, as Gibson teaches, to offer further amusement to a user in that the cylindrical drive unit would exhibit a different path of movement.

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8. Claims 1-3, 6, and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ussen, USPN 6,550,089 in view of Sohmer, USPN 3,742,547.

Ussen discloses all elements mentioned above, and further includes an embodiment (Figures 1-3b) including a cylindrical shaped drive unit (5) having an outer surface (see Figures 1-3b) and a motorized internal mechanism adapted to impart rotary motion to the drive unit (1; Column 2 Line 67 to Column 3 Line 2). In regards to claim 2, Ussen does disclose that the drive unit surface is sticky (Column 3 Lines 20-25, 40-42) so inherently the drive unit has an entire surface that is sticky. Regarding claim 6, the shape of the outer surface of the drive unit is at least substantially cylindrical see Figures 1-3b). Ussen states that drive unit (5) has a sticky surface (Column 3 Lines 20-25, 40-42), however does not disclose that there is a sheet having a first side and a second side that is connected to complete or partial portions of the outer surface of a cylindrical shaped drive unit.

Sohmer discloses a lint sweeper (10) for cleaning floors and carpets using an adhesive surface (25) on a cylindrical roller or drive unit (23) for removing lint and dust (Column 1 Lines 39-42). The adhesive surface of Sohmer is a sheet having a first and second side (the adhesive surface or layer or tape 25 has a first and second side; Figures 2-3b) so that after the adhesive cleaning surface is contaminated with debris, a user can remove a used portion and provide an unused portion (Column 2 Lines 48-56). The sheet (25) only partially encompasses the drive unit (23; Figure 2).

It would have been obvious for one of ordinary skill in the art to substitute the sticky cylindrical drive unit of Ussen for a cylindrical drive unit that has an adhesive

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sheet with first and second sides that is connected to the outer surface of the drive unit, as Sohmer teaches, so that a user may remove debris-contaminated sheets and provide unused cleaning sheets when cleaning. Also, it would have been obvious for one of ordinary skill in the art to modify the outer surface of Ussen so that the adhesive cleaning sheet portion is only partially encompassing the drive unit, as Sohmer teaches, so that only the surface rotary contact with the floor includes the cleaning sheet and material is not wasted on side portions that do not serve as cleaning surfaces.

9. Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 10-262881 (see computer generated English translation) as applied to claim 1, in view of Fujimoto et al., USPN 5,435,035.

JP 10-262881 discloses all elements above including a battery as a power source (paragraph 28), however does not disclose a means to detect and display low battery power or an alarm to alert the user.

Fujimoto et al. teach a floor treating machine that operates on battery power that further includes a means to detect low battery power (the control circuit 25; Column 6 Lines 3-4) and a display (20) that also is a visual alarm that shows low battery power (Column 6 Lines 4-7).

It would have been obvious for one of ordinary skill in the art to modify the cleaning device of JP 10-262881 to further include means to detect and display low battery power and an alarm, as Fujimoto et al. teach, in order to alert a user to change the batteries in the cleaning device.

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Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C. Guidotti whose telephone number is (571) 272-1272. The examiner can normally be reached on Monday-Thursday, 7:30am - 5pm, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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